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ABSTRACT

Action research is the process by which practitioners (such as teachers and principals) attempt to study their problems in context in order to more accurately evaluate them and to make informed decisions. The humanistic research approach not only revives useful action research strategies, but refines and revises them with the intent of making positive change in the human condition while taking into account the complexity of the human condition. This approach is in no way incompatible with traditional scientific research. Instead, it can be used to complement classical research. Essential characteristics of humanistic research are as follows: (1) the relevance and urgency of the problem takes precedence over methodological considerations; (2) the goal of humanistic research is the improvement of an unsatisfactory educational situation; (3) the humanistic researcher acknowledges his/her subjectivity; (4) humanistic research does not claim to be able to make generalizations; (5) with adequate training, individual educators will be able to conduct humanistic research on their own; (6) humanistic research cannot rely solely on statistical significance; and (7) this approach should not be used whenever rigorous scientific research is possible, since humanistic research will not contribute to theory formation. (Author)

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THE HUMANISTIC APPROACH TO EDUCATIONAL RESEARCH

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BY

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ABSTRACT

THE HUMANISTIC APPROACH TO EDUCATIONAL RESEARCH

by Renata Tesch

The discontent of educators with the "exceedingly modest results that educational research has achieved thus far" stems from the exclusiveness of application of and recognition for the "scientific" method, and a narrow definition of the term. The principles of classical research dominate most educational research methodology books in such a way that diversions from this method are automatically regarded as "unscientific" and therefore invalid.

This sentiment used to be so strong that when, twenty-five years ago, the first attempts were made to add to the range of educational research methods, the propagators of action research felt compelled to assure their audience that they, too, were using a "scientific" approach. The fact that their interpretation of the term did not coincide with that of hard-core scientists earned them their contempt, and was one of the reasons for the disrepute with which action research finally was regarded. Nevertheless, it is my contention that educational research cannot rely exclusively on one methodological mode. The humanistic approach not only revives useful action research strategies, but refines and revises them. It goes beyond action research through the recognition and avoidance of its deficiencies and the addition of new elements. Humanistic research is systematic inquiry which aims at positive change in the human condition while taking into account the complexity of the human situation.

The following are the essential characteristics of the humanistic research approach:

1. The relevance and urgency of the problem takes precedence over methodological considerations.

2. As in action research, the goals and distinctinve feature of humanistic research is the improvement of an unsatisfactory educational situation.

3. The humanistic researcher acknowledges his/her own subjectivity. S/he does not hide the fact that s/he has a stake in the outcome. His/her motives and values, however, are laid open for the reader and can be taken into account.

4. Humanistic research does not claim to be able to make generalizations. The aim is realistic transmittability to practitioners.

5. With the advance of innovative programs in higher education which allow experienced practitioners to acquire research skills appropriate for the solution of their problems, humanistic research studies can be carried out by individual educators.

6. To convince his/her readers of the validity of his/her actions and findings, the humanistic researcher cannot completely rely on eventual statistical significance. It has to be apparent that s/he did the best research possible under the given circumstances.

7. The humanistic research approach will not contribute to the formation of a theory or the explanation of educational phenomena. It should not be used whenever rigorous research is possible and will serve the same purpose.

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I. THE INEFFICACY OF EDUCATIONAL RESEARCH

In 1938 the members of the "National Society for the Study of Education" looked back at the first generation of 20th century educational research and found its results "impressive" [61 p. 487]. When this same organization evaluated educational research again, in 1972, it had to admit to "the embarrassing discrepancy between the mountainous labor of educational research and its mouselike results" [51 p. 219]. Today it is hard to find anybody inside or out of education who claims that educational research has been a success. Not only does no one seem to think highly of the contributions educational research is making, but the subject is generally considered dull and boring. Most of my friends cannot quite hide their pity when they learn that a substantial part of my time is devoted to reading educational research. If it were not for government agencies, who need to justify their expenditures, university professors who need to publish, and graduate students who need to fulfill the requirements for a doctoral degree, educational research might well be dead. Would anyone do educational research purely for the import and excitement of it?

Some people do indeed carry out exciting educational research that has a major impact on education. However, their number is too small to raise the status of educational research within academia. Educational philosophers and practitioners agree that research has contributed very little to progress in education. C. D. Hardie, in a 1973 volume on the philosophy of educational research, observes that "research in education has achieved very little up to the present, and it is fairly true to say that it is taken seriously mainly by those who are engaged in it. The great majority of teachers in schools, and almost all teachers in universities, regard it as of little value" [23 p. 87].

Quite obviously, educational research does not live up to the expectations of educators. What are their expectations? What is it that makes research valuable or successful? According to the common distinction between basic and applied research, two answers can be offered to this question. First, research is expected to develop a theory or at least to accumulate a reliable, coherent body of knowledge. Second, it is expected to provide

the basis for improving practices. Educational research is close to failure in both.

There is much controversy over the question of whether educational research can indeed develop a theory of education. A scientific theory of education, according to some educators, might never be constructed, since education is not a scientific phenomenon which yields laws that in turn enable us to make predictions. Efforts to create such a theory have been futile, because a theoretical structure cannot be invented. It has to be discovered [10 p. 10, 91, 129; 43 p. 425]. If it does not exist, it will not be found.

It is not the purpose of this paper to carry this argument further, since it will not be resolved easily. Instead I will examine the reasons why educational research has had so little impact on the practice of education. I shall then proceed to suggest at least one avenue that will avoid some of the mistakes made during the last thirty years of educational research, and which holds promise to make research more relevant to practical problems in education and more intriguing to educators.

II. CURRENT CRITICISM OF EDUCATIONAL RESEARCH

It seems ironic that the very feature which spurred the hopes of the 1938 researchers is the one which today draws most of the criticism of educational research, and is assigned some responsibility for its failure: the scientific techniques of inquiry. Compared with the pre-scientific research before the turn of the century, the scientific approach has indeed yielded a surprisingly large harvest. It is understandable that educators in the 1930's were impressed. Already at that time, however, some were wary about the limitations of scientific techniques. They warned that philosophy should not be neglected. They were also critical of the methods, but optimistic that new ways would be found which would eliminate their limitations [61 p. 327].

These educators were quite right. Advances in design, statistics, and electronic data processing have provided us with very sophisticated means of solving problems which thirty years earlier were considered beyond our reach. Consequently, it is not the scientific method as such that is criticized today. The criticism centers around the overemphasis of the scientific method, i.e. the development of the myth that everything within educational research that can be labeled scientific is to be accepted, whereas anything that is not scientific -- or scientific enough -- has to be regarded with contempt or at least suspicion [39 p. 61]. The problem is compounded, in my opinion, by the retainment of the initial narrow conception of "scientific" by the early researchers. Interpretations like the one by Fred N. Kerlinger, "Scientific research is systematic, controlled, empirical, and critical investigation of hypothetical propositions about the presumed relations among natural phenomena" [28 p. 13], are widely accepted. In combination with the reference to only one, namely the scientific method in the introduction of many methodology books, this has resulted in a restricted definition of the term within today's educational vocabulary. Rarely is scientific interpreted in a broad sense as the exclusion of the superstitious, illogical, or empirically unverifiable. The more limited version is the one which usually is understood as underlying the notion of scientific research in education. It will in this paper also be referred to as the classical research approach.

In the winter of 1973/74 I read an article published in the American Educational Research Journal which called my attention to the existence of the growing dissatisfaction with this classical approach. An East Indian researcher, Shib K. Mitra, in summarizing his observations about the "salient features of American research," expressed many of the same impressions I experienced upon coming to the United States from Germany. "One of the most striking features," writes Mitra, "is the quantitative approach, that has been brought into this field and has been developed to a point of high degree of sophistication" [34 p. 42; see also 42 p. 38]. He then continues: "but this emphasis on scientific method, and particularly the statistical and psychometric techniques, has lead to an unhealthy development in the field of educational research" [34 p. 43].

Mitra and other critics (within the United States) of American research point out various symptoms of this unhealthiness [2 p. 59; 5 p. 30; 17 pp. 54-57; 18 pp. 124-130; 19 p. 577; 39 p. 61; 40 p. 329; 42 p. 39; 48 p. 327]. They make basically five points:

1. What was called the "scientific method" fifty years ago referred to techniques which were developed in the process of studying the natural sciences. This method cannot be applied to education with the same exclusiveness and success as it can to the natural sciences, because education is a different kind of phenomenon. It is not an exact science; it is a human construct [18 p. 126]. It is more complex, diverse, and unpredictable. We rarely can control all the variables we should control, and we hardly ever can be sure that no unaccounted variables have interfered. In making statements about education, we can talk at best in probabilistic terms only and, at worst, ignore the disconcertingly human characteristics of educational problems.

2. Only certain educational problems lend themselves to investigation by classical methods. The overemphasis on the scientific approach has limited educational research to "researchable" problems. This normally means that investigators are forced to choose problems which can be broken down into measurable components, so that differences can be discerned. In effect, the classical research design has become a "conceptual prison" [25 p. 4]. Doctoral students are advised to find a dissertation topic which, of course, is relevant, but above all which is

researchable. It has to fit into one of the research designs offered in the standard methodology books. Relevant research questions which cannot be bent to fit these designs have to remain unsolved.[1]

3. The kinds of educational research questions which are most similar to questions posed in the natural sciences are those that can be solved using an experimental method. The experimental method has therefore become most prominent in educational research methodology. It occupies the majority of the pages in almost every methodology text, and often authors display an experimental bias in the rest of their writings. Researchers feel encouraged to employ the experimental method, since they merely have to follow the -- albeit quite sophisticated -- recipe. In addition, this method is "safe." As long as the researcher does everything according to the recipe, s/he will achieve what s/he set out to do, since even an acceptance of a null-hypothesis usually counts as a research result.

4. The overemphasis on the classical method demands that the educational researcher be a "scientist." Research is done for other researchers, communicated to and discussed with other researchers. It is not primarily done for the "ordinary" educator, the most typical of whom is the classroom instructor. Practicing educators experience a gap between their concerns and those of researching educators. Their concerns are rarely the ones which generate research questions. The practitioner is pushed into and confined to the role of the research consumer.

5. Not only has the classical approach created a gap concerning the interest areas of researcher and practitioner, it has also created a communication gap. The so-called scientific method has generated a language of its own. This language has become so identified with the method, that attempts to report research findings in ordinary English are considered "unscientific" and therefore not respectable. Mitra observes "there may be many persons who are willing to take part in educational research, but

[1]The prevailing emphasis on method and corresponding neglect of substance was recently demonstrated in a national survey. Out of 33 equally weighed criteria selected for the evaluation of published educational research, only two referred to the content of the study, all others to method, internal logic, or presentation [58 pp. 120-121].

kept out of such participation by the language of educational research" [34 p. 44; see also 43 p. 428; 64 p. 40]. Even those educators who have mastered the methodological and statistical vocabulary do not enjoy reading research, since the reading is dull, and research results do not translate easily into pragmatic terms. At the same time, when the majority of educators have been assigned the role of consumers of research results, these results are made almost inaccessible to them through "scientific" jargon.

Another point which should be made about educational research today is its fragmentation. The classical approach has contributed to this fragmentation through the limitations it imposes on the choice of research problems. To be researchable, projects are often confined to a part of a part of a larger question, and the reading of isolated research results is impractical and inconsequential for the general educator. Individual research results usually need to be summarized, analyzed, and interpreted in order to discern "what the research says to the teacher."[2] It does not speak to him/her directly, and it does not have immediate meaning for him/her.

Thus the much heralded "scientific" approach, which propelled educational research forward in the first three decades of this century, has turned out to be a mixed blessing. The fault does not lie within the method itself, which has indeed been refined and provided us with most sophisticated tools for producing valuable results. The fault lies with the common belief that one scientific method -- derived from the natural sciences -- is the only acceptable, indeed the only, way of conducting educational research.

Obviously, the criticism listed above should not be misunderstood to apply to every research project in education. There is no question that excellent research studies which avoid these flaws have been carried out. Furthermore, another perspective needs to be considered, of which the British researcher W. D. Wall

[2]Title of a series published by the National Education Association, Department of Classroom Teachers.

reminds us: "Since the turn of the century we have gained at least as much knowledge of the educational process as was won about disease from the time Harvey expanded his theory of the circulation of the blood (1616) to the rise of notions about environmental sanitation in the nineteenth century" [56 p. 163]. Education has had -- and still has -- able and diligent researchers. Without diminishing their individual merits, however, it it quite evident that, on the whole, the expectations of many educators have not been met.

III. TRENDS AND NEW PERSPECTIVES IN EDUCATIONAL RESEARCH

As educators became increasingly aware of the inadequacy of educational research outcomes, some of them not only have pondered its causes, but also urge us to learn from our experiences. It is apparent today that new trends are developing in our attitudes towards educational research. The 1972 Yearbook of the National Society for the Study of Education is entitled "Philosophical Redirection of Educational Research," and a recently published methodology book is called "Changing Perspectives in Educational Research" [62].

These evolving trends in attitude towards research are primarily directed toward avoiding the mistakes described in the previous section. They seek to loosen up the rigidity of the classical approach and to assign greater priority to the educational relevance of a problem, rather than to its methodological aspects. A number of propositions are becoming more widely accepted:

First, there is increasing awareness that the almost exclusive use of the classical method submits educational research to undue restrictions. This method should be confined to those phenomena in education which come close to natural phenomena (for instance, the investigations into how learning takes place), or to those which can be quantified without distortion.

These problems comprise only part of our research interest. Will the others remain unsolved? Their fate is not as bleak as one would expect. A number of educational researchers agree with this writer that the notion of scientific method, which we inherited from the first generation of education researchers, is a narrow and misleading one. "Critical thinking need not be equated with statistical thinking, and controlled observation need not necessarily be the so-called measurement" [34 p. 43], says Mitra. Even in the natural sciences not just one method is used to study all the problems. There exist different approaches and criteria for acceptable research, and many great findings are achieved through creative exploration rather than rigid application of the scientific method. Gordon Tullock in his book "The Organization of Inquiry" makes a simple and powerful statement: "The only general method existing in science is to think hard about problems

and collect data" [55 p. 166].

A few researchers have gone further and actually suggested terms which describe these methods of hard thinking and data collecting. They talk about the use of experience, reason, and systematic observation. Often, we find the same notion expressed in the words "systematic problem solving." The research methodologist David Wiles introduces the idea of "directed thinking." He explains that the difference between this approach and the so-called scientific method is one of degree rather than kind. It involves "a systematic way of thinking which stresses rationality and objectivity" [62 p. 11]. Applied to educational problems "the thinking becomes less formal, more internalized, and usually directed at one major problem with a series of interlocking subproblems" [62 p. 11]. He describes the various steps involved in the process of directed thinking in his book, "Changing Perspectives in Educational Research."

The first trend, then, seeks to broaden the definition of "scientific" and to abandon the notion that only the classical approach is legitimate. The second is closely related. It has to do with a shift in emphasis on problems researched. Again it is Mitra whose poignant remarks aptly describe the situation: "In the field of education, one would like to see a systematic study of significant problems rather than a scientific study of insignificant problems" [34 p. 43; see also 19 p. 576]. What he means by significant problems are those which will allow us to make decisions concerning changes in the educational system. These are often the ones which defy any attempt to submit them to a rigorously "scientific" investigation. They are the real life situations, which involve whole human beings and intricate social interactions, and which can only be approached holistically. Nevitt Sanford, the humanistic psychologist who has become known for his research done with an holistic orientation, warns us that this kind of research will not soon "achieve the standards of precision and elegance that are often obtained in laboratory experiments involving a few simple variables," and that we cannot expect it to be "other than difficult and expensive" [41 p. 196]. But he nevertheless urges us to undertake this research, since it is important "to study problems that people really worry about rather than only problems formulated on the basis of reading the professional journals" [41 p. 192]. Many scientists in education

would agree. Only when research does take up the problems educators worry about will it become a major change agent in education, and escape the accusation that it has only very little to contribute.

This argument provides the explanation for the third observable trend in educational research: the demand that practitioners become involved. If research is to provide a basis for decision making within educational practice it has to become concerned with the problems teachers and administrators face during their average school day. According to John Goodlad it is essential that "our inquiries begin and end in the stuff of educational practice" [21 p. 106; see also 13 pp. 173-174; 56 p. 169]. Otherwise, we will not bring about advancement in education. Much progress and innovation in education has been achieved in the past by actions of practitioners without the help of sophisticated research. It is now time to cooperate and to discover that the practitioner and researcher have much in common in the way they go about the business of improving education. "Practitioners use objectively based, systematic thinking in the daily job of educating children, researchers share the moral and practical concerns of education" [62 p. 8], claims Wiles, and he predicts that "the 1970's will find it increasingly hard to differentiate two separate categories of educators. The number of educators wearing both the hats of researcher and practitioner will grow while the number of purists or separatists will diminish" [62 p. 10].

IV. THE BEGINNING OF THESE TRENDS: ACTION RESEARCH

The demands to make other than the classical research methods respectable and legitimate, to address relevant educational problems and to involve the practitioner are -- disconcertingly like almost everything in education -- not new. They underlie the invention of action research, which developed from much the same criticism concerning the inability of educational research to produce results of educational value.

Action research is special in recent education history in that its development cannot be traced to the progressive movement. When Stephen M. Corey in 1953 wrote the only substantial publication on action research ever done, a book called "Action Research to Improve School Practices," the progressive movement was fading out. The roots of action research, however, and also its name, date much further back than Corey's work. A few of the reviewers who wrote in the 1938 Yearbook of the Society for the Study of Education had bemoaned the fact that the beautifully scientific research reported in the volume had not been accepted in the schools [61 p. 71], and that the direct contributions were disappointing [61 p. 323]. They suggested that principals and teachers themselves carry out research in the public schools. Meanwhile, the psychologist Curt Lewin had done studies on human relations with the explicit intention to improve them, and John Collier, who used a similar approach in the area of social planning as Commissioner of Indian Affairs, called this type of investigation "action research."

For use in an educational setting Corey defined action research as "the process by which practitioners attempt to study their problems scientifically in order to guide, correct, and evaluate their decisions and actions" [14 p. 6]. In his book he then proceeds to describe the distinctive features of action research which set it apart from what he calls "traditional" research. He illustrates by giving examples on how to carry out the new "informal" research.

Corey did not invent a new research methodology. He recommends traditional techniques of observation and even experimentation whenever they are appropriate. It is not the method he wants

changed, but the attitude towards research. Previously only academicians were considered capable of doing research, and they usually did their studies in solitude. He believes teachers should participate in research, working in groups with a consultant from a university or research institution. It is to be acknowledged that they have an interest in the outcome of the project; in that sense research is no longer considered value free. In fact, values are explicitly expressed in the choice of the desired outcome. Action research is improvement-oriented, and the decision on what constitutes improvement over current educational practices implies a value judgment.

The goal of improvement dictates the strategies to be used in action research. It affects the formulation of the research hypothesis. Action hypotheses concentrate not on a fact to be established but on an improvement to be achieved. A null-result is not acceptable; the study will not be completed until the desired outcome is achieved. This necessitates a flexibility in research design which is not found in formal studies. Evaluation of the effect of the innovation under scrutiny has to be carried out almost continuously, and as soon as there is an indication of failure, the innovation has to be modified accordingly. Action hypotheses may be changed several times during the research process in order to fit the goal of the study. The outcome is the practical improvement of a previously unsatisfactory situation.

During the 1950's and 1960's action research was used mainly for studying curriculum problems in elementary and secondary schools. Many valuable studies were done, but also a number of dangerously sloppy ones, which soon discredited the name. Heralded by some as "a concept as American as the main theme of the Declaration of Independence" [8 p. 14] and "the best of both worlds" [56 p. 167], action research on the other hand attracted major criticism as a fad and a procedure which could not properly be called research. Toward the end of the 1960's, interest in action research declined, and it could not be defended by pointing to a collection of results more impressive than those of traditional research.

Today only rarely do research studies deserve the name action research as it originally was conceived. The term has come to sometimes mean any study conducted in the field rather than a

laboratory setting, or a study carried out by practitioners in a team approach. It is also occasionally abused to describe research which did not use scientific controls, as a way of making it sound semi-respectable; or the word "action" is taken to mean that the research itself is the action and no results have to be achieved [36].

It is interesting to note that the original concept of action research has been taken up in Germany, where Wolfgang Klafki, a widely respected educator, re-introduced it in 1973. He describes it as task-oriented research. At the time of his publication he was conducting a major research study involving a number of graduate students and a group of teachers from several schools in the state of Hesse. The task was to find for the innovative comprehensive school -- as part of the ongoing German school reform -- a curriculum conducive to developing in students cooperative social attitudes and the ability for self-responsible learning [30]. Klafki sees much promise in using action research for a problem of these dimensions. His project and his writings have created such interest in this "new" kind of research that one of the leading educational journals in German recently devoted an entire issue to "Handlungsforschung" [7], and an author-team of four published two books about its practical application and social significance [24, 65].

V. THE SHORTCOMINGS AND THE STRENGTHS OF ACTION RESEARCH

While action research is experiencing a revival in Germany, it might well be considered obsolete in the United States. Only very few research methodology books today mention the concept. This is disappointing for those research philosophers who argue that we need an approach less rigid and limiting than classical research. Apparently it is quite impossible to make anything other than the so-called scientific method command respect. However, this presumes that action research as defined in the 1950's is the only conceivable alternative, even today. In order not to discard the baby with the bath water, it will be useful to consider the shortcomings of action research which might well have caused its decline. Once we learn about the mistakes or misunderstandings which occurred, we not only will be able to avoid them, but -- as will be shown in the subsequent four chapters -- we have a chance to replace them with workable notions and properties.

The twenty years which have passed since the propagation of action research afford us a hindsight that was not available to the action researchers of the 1950's and early 1960's. One of the basic handicaps at that time was the emergence of the charge that action research was antithetic to classical research. Action research acquired this reputation in spite of the fact that Corey actually used the word "scientific" in his action research definition. He also made quite clear that he considered action research a supplement to professional research, not a substitute for it. Scientists, however, soon challenged the notion that there was anything scientific about this approach, and suggested it should more properly be considered teacher training [16 p. 68]. Practitioners responded with contempt for the formality and rigidity of the "conventional" and "traditional" methods. This defense often led to complete disregard of scientific standards, while maintaining that the procedures used still deserved to be called research. A constant controversy and a polarization of opinions were the unfortunate results.

Perhaps in consequence of this polarization, action research was often not done as systematically as it should have been - even by well-meaning researchers. They did not feel that they had to be committed to rigorous standards; and the methodology described

in Corey's book was not explicit enough to provide sufficient guidance. The synonym for action research became "informal" research or "ad hoc" research, which seemed to imply a license to do research without familiarity with basic research techniques. Teachers often engaged in what they called action research in such an amateurish and uncritical fashion that research methodologists were quite justified in saying that action research would be better defined as "quantified common sense" [26 p. 146].

A third shortcoming of action research resulted from Corey's attempt to escape criticism by "hard" scientists through somewhat altering the notion of generalizability. He explained that up to now scientists had generalized laterally, namely to the population consisting of all current subjects with the same characteristics as the subjects of the sample. Action researchers, according to Corey, generalize vertically, into the future. "The teacher's present class can be thought of as a random sample of the total population of his future classes" [14 p. 135]. This statement is not only slightly questionable in terms of a strict definition of randomness, it also does not take into account the enormous changes which can occur over time in student generations. Furthermore, teachers grow professionally, experience changes in attitudes, and move to different places, possibly teaching different grade levels. Corey is not any more guilty of overemphasizing generalizability than most other researchers who work with a given classroom --as will be shown later -- but the notion of vertical generalizability nurtured a suspicion among traditional researchers that action research might use scientific concepts without sufficient justification.

The fourth handicap of action research was its dependence on cooperation among people with different roles and training, usually a researcher and a number of teachers. Traditionally, these two groups of educators had not been close, and apparently it often was difficult to overcome prejudices. Teachers, who as a rule are under time pressure, could easily develop the suspicion that the professor from the university was merely using them as convenient research workers, and the research scientist in turn might often have become exasperated with the teachers' interference with his carefully constructed research design. As a result, it appears that many studies were done without the advice and super-

vision of an expert, or failed to materialize because of lack of collaboration.

Even the harshest of critics of action research, however, after accounting for all of the above points, had to acknowledge a number of positive features inherent in this new approach. The involvement of practitioners in almost all cases guaranteed that the problems tackled were real ones that carried urgency and importance. Teachers were not as easily deterred as "rigorous" researchers by the complexity of the natural setting, and demanded that their research questions not be delimited to a scope where their relevance became questionable. A carefully done action research study could indeed bring about constructive change, at least for the teachers who participated and for their students. Educational significance was not sacrificed for the attainment of statistical significance for a relatively trivial educational result.

Not only does action research facilitate the choice of relevant research questions, it also demands that the researcher provide a solution. The central notion of the action-hypothesis made improvement a requisite outcome of action research. Traditional studies are satisfied when evidence is gathered which proves that the educational procedure tested is either successful or it is not. Action research was consequential inquiry in the sense that it concentrated on the consequences of educational actions taken. The researcher would not give up before either the desired improvement was achieved or all possible strategies were exhausted and s/he was convinced and could convince his/her readers that it was not within his/her power to bring about the positive change sought.

Action research also has to be credited with acknowledging a value position on the part of the researcher. The notion of objectivity in classical research is traditionally extended to both the objectivity in the collection of data, as well as to objectivity towards the outcome. Researchers in the natural sciences might indeed often feel quite neutral towards the outcome of their projects, especially when they have neither to gain nor to lose from it. However, even in the natural sciences the choice of research topic is usually a matter of preference by the

researcher, and therefore not quite value free. Researchers in the social sciences express their value position not only through the choice of topic, but also through interest in the outcome. As human beings, they are concerned with what they consider the betterment of the human situation. Education in particular, claims the research philosopher Harold B. Dunkel, "is inevitably involved in normative discourse and problems of value" [51 p. 79], since education agents do not seek change for the sake of change, but change for the sake of improvement. Improvement is not an objective phenomenon; it depends on the researcher's interpretation according to his/her value system. Action research made this explicit and confined objectivity to the place in research where it is indispensable: the gathering of empirical evidence and its interpretation.

In summary, the strengths of action research were its greater conduciveness to the selection of relevant problems, the recognition of the researcher's interest in the selection as well as the outcome of a project, and the insistence on a positive result, i.e. an actual educational improvement. Its shortcomings were the dependence on cooperation among various people, the questionable notion of vertical generalizability, and the misunderstandings that action research offered a license for careless research and that it was incompatible with classical research.

After these characteristics have been recognized, the next task is to avoid the weaknesses of action research while building on its strengths. A new research approach, which does just that, might inherit the negative connotations associated with action research if it retained its name. Therefore, this new approach will be called humanistic research.

Humanistic research is systematic inquiry which aims at positive change in the human condition while taking into account the complexity of the human situation.

VI. THE COMPATABILITY OF THE CLASSICAL AND THE HUMANISTIC APPROACH

From the previous four chapters the reader might have developed the impression that I regard classical research with disrespect. Therefore, I need to reiterate that one of the objectives of this paper was to examine the reasons why educational research has had so little impact on the practices of education (p. 2). The classical method is a very sophisticated one, which today displays an elegance that is attractive to every mind that appreciates the beauty of logic and systematic design. It is highly suitable for certain kinds of projects, in particular those which aim at the accumulation of a body of knowledge. The humanistic research approach is not meant to replace or attack classical research methods. It is meant to supplement them.

Action research was clearly defined as applied research, and its users and promoters often acted as if applied research were superior to or at least preferable to basic research in education. Basic and applied research are two widely used concepts in research, which testify to the sense of order displayed by scholars. The term "research" encompasses projects of such diversity that it is appropriate to distinguish at least basic categories. However, the range of possible projects apparently is continuous, and there exists little agreement on where a line should be drawn between basic and applied. Consequently, most definitions of the two concepts are somewhat vague, and many writers prefer to redefine them as they want them to be understood. The most useful procedure seems to be a description of the concepts in terms of the questions asked within the two kinds of research. John B. Carroll offers a cautious definition which he has applied specifically to education: "Basic research seems to differ from applied research in the fact that it is more concerned with 'understanding' and the attainment of knowledge about fundamental variables and their relationships. Applied research . . . is generally concerned with the control of socially significant phenomena, or if control is difficult or impossible, at least their prediction" [11 p. 115].

In spite of many attempts to produce clear distinctions it is often difficult or impossible to determine whether a given

research study falls into one or the other category. Most writers allow for some overlapping. In fact, some argue that every study contains elements of both. All basic research, they claim, leads eventually to application, and all applied research contributes in some way to basic knowledge. Scholarly disputes have developed over this question, while the terminology continued to expand: theoretical vs. practical research, pure vs. applied research, fundamental vs. empirical research or even research vs. development. Recently an interesting new approach was adopted by Lee J. Cronbach. He suggests distinguishing between conclusion-oriented and decision-oriented inquiries [16 p. 20]. The two terms are related to the older distinction between basic and applied research, but they are not congruent. "A conclusion-oriented study is not performed for the mass of educators; it is performed for the enlightenment of the investigator and the small community of specialists thinking about the same problem. The evidence for a particular hypothesis, or the accurate description of a particular phenomenon, is the harvest the investigator offers his specialist colleagues" [16 p. 127]. "The conclusion-oriented study . . . takes its direction from the investigator's commitments and hunches" [16 p. 20]. It is possible to conduct conclusion-oriented investigations which lead to an application of the findings. The decision-oriented study, in contrast, is done with the explicit intention of applying the results to specific ends; in fact, Cronbach sees this type of investigation as "commissioned." In a decision-oriented study the investigator is asked to provide information wanted by a decision maker. "The decision maker believes that he needs information to guide his actions, and he poses the question to the investigator" [16 p. 20].

Humanistic research belongs, according to its intent, in the category of applied research. However, it does not represent a subgroup. As subgroups could be listed "research in the development of products," "operational research" [16 p. 170], and evaluation research. Even though these, ideally, share with the humanistic approach the goal of practical improvement in education, they have so far employed the classical procedure of conducting research, which calls for rigor, hard data, and generalizability [60 p. 2; 39 p. 51]. (As we will see, these are criteria which do not necessarily apply to the humanistic approach.) All three types of studies could make use of humanistic strategies and

criteria.[3] The humanistic approach, then, is not a subgroup of applied research, characterized by its intent or content, but it is one possible mode in which applied research may be carried out.

The humanistic research is a strategy and underlying philosophy which can be used for finding answers to particular questions, just as the classical approach is useful for certain kinds of tasks It is especially applicable to complex problems in a social setting which need practical solutions. There is no claim, however, that such research is more worthwile than basic research. "Humanistic" should not be misunderstood as implying that other methods of inquiry do not have human qualities, or that theory and basic knowledge are inconsequential for human enterprises. Obviously any discovery in the social sciences, which grew out of human interest, is related to human problems. "Humanistic" as used here in connection with a certain approach to inquiry is meant to serve as a reminder that in many research settings people cannot be treated as scientific objects, as controls and experimentals who will behave in response to certain independent variables. Two generations ago it constituted a major breakthrough of research methodology to find ways of reducing the human setting to such measurable dimensions, and there is no question that valuable information can be and has been ascertained in this fashion. However, not all the information we need can be produced this way. Some human dimensions defy precise measurement, and especially in decision-oriented research problems are often too complex to be fitted to a classical research design. The classical method is must useful in conclusion-oriented research. However, just as the humanistic method is not identical with applied research, the

[3]Formative evaluation especially is quite likely to gain from a more humanistic approach. "Formative evaluation produces information that is fed back during the development of a curriculum to help improve it" [60 p. 16]. Unlike summative evaluation it is not purely descriptive. In fact, some educators perceive it much like action research. Suchman even borrowed the action hypothesis: "By changing a (through a planned program), the probability of b (which I judge to be desirable) increases" [50 p. 45]. Unfortunately, in practice, several factors tend to interfere and make the results less satisfying than the practitioner would hope. These factors are the fact that the evaluator is not also the decision-maker, that the program has basically been designed before his/her involvement and without his/her input, and that the person or institution who commissioned the evaluation expects strict adherence to "the principles of scientific methodology" [50 p. 45].

classical method and basic research should not be considered synonymous. Both refer to strategies of research, not research content.

The humanistic research approach is not meant and should not be misunderstood as an improvement of the classical method. In the past, decision-oriented research has been in greater need of alternative methods for searching than conclusion-oriented research. The humanistic approach is responding to this need and filling a vacuum. It is not substituting for classical research, and it should not be considered anti-scientific or non-scientific. Many features of the humanistic research approach -- as will be shown in the following section -- are the same as those commonly associated with scientific methods. The term "scientific," however, has over the years taken on a meaning for researchers that is confined to the terminology and methodology described in standard educational research texts. When it is claimed here that humanistic research represents a scientific approach, in the same way that classical research does, it needs to be understood that scientific is not interpreted in this restricted sense. Rather, it is used in its more general meaning as described earlier (p. 3). For the educational researcher "scientific" generates the notion of rigorous research using strict control and precise measurements. Humanistic research describes inquiry which is systematic, rational, objective, and realistic.

VII. HUMANISTIC RESEARCH AS SYSTEMATIC INQUIRY

As soon as it is acknowledged that "rigorous" is not an attribute that can be applied to the humanistic research approach, some critics will argue that such a procedure cannot properly be called research. They have a right to do so, but they should not expect widespread support. Not even in the natural sciences are scientifically rigorous methods the only ones accepted. Many discoveries would not have been possible without exploratory studies and those which generate hypotheses and tentative parts of theories. It will be shown in this section that the attributes "systematic, rational, and objective" are sufficient to warrant the acceptance of humanistic methods as legitimate research. The attribute "realistic" is the one which has been conspicuously absent from previous research definitions; it denotes the special contribution made by this new approach to research in the social sciences.

Before pursuing this argument, however, note that the danger is less likely to be in denying recognition for humanistic procedures as respectable research, and more with a possible misunderstanding by practitioners, just as happened to action research. Many practitioners interpreted action research as a license to do sloppy research. I want to avoid the mistakes that led to such misunderstandings. One of them was the previously mentioned notion that action research was opposed to classical research and could therefore do without all those rules, which were considered criteria for good research. Researchers will need to learn that that humanistic approach is no easier or more "generous" than the scientific approach, and in fact may be more demanding, calling for more ingenuity and self-discipline. They need to acknowledge that the humanistic approach does not claim to be superior to other ways of doing research, and that the word humanistic does not imply an anti-scientific attitude.

While such a misleading interpretation of action research did not grow out of its definition, but developed from uninformed use of the concept, the father of action research in education, Stephen Corey, did contribute to misconceptions through a number of statements he made in his book. These concerned mainly the action research design. In referring to distinctions between traditional

research and action research, he says, "In traditional research careful thought is given to planning the design of an investigation before it is launched. This design is usually adhered to rigidly until the investigation has been completed" [14 p. 12]. He goes on, "The initial design of action research cannot be inviolable in this sense. The definition of the problem, the hypotheses to be tested, and the methods to be employed in testing the hypotheses undergo modifications as interim results are validated or invalidated in practice" [14 p. 12]. This description suggests such limitless flexibility that even well-meaning researchers would have to ask: How can a procedure of total alterability possibly be systematic?

The humanistic research approach is flexible enough to take into account the complexity of human nature, but it will not forego a well planned and organized design. It is thorough, systematic inquiry.[4] The most basic ingredient of research, the definition of the problem, will be unchangeable once the study is launched. When using the humanistic approach the researcher will decide on and operationally define a goal. This goal is expressed in terms of the improvement sought. Once the researcher has described to his readers the unsatisfactory situation and convinced him of the changes which will constitute improvement, it would be whimsical to abandon these definitions in midproject. Likewise, the data needed in order to decide whether the goal has been achieved and the methods for collecting this information will be determined beforehand. They will not be expected to be changed since the study has to be so thoroughly thought through that improvements of design are not anticipated. If, however, in the process of conducting the study an idea emerges that would constitute a valuable contribution to the original design, the humanistic approach will not reject it, but incorporate it in the same systematic and organized way the rest of the study is carried out.

[4]This is not in contradiction to other uses of the word humanistic in the behavioral sciences. L. Stiles reminds us that representatives of humanistic concerns, like "Carl Rogers, Abraham Maslow, Gordon Allport, J. F. T. Bugental and others, have always demonstrated a fundamental dedication to systematic, thorough, rational approaches to the study of man's efforts to actualize his potential" [49]. (Emphasis mine.)

Various systematic inquisitive procedures are conceivable within the humanistic research approach. The design is determined largely by the goal of the study, and it is here that one major distinction is to be made between the classical and the humanistic approach. Whereas the classical approach primarily seeks truth, the humanistic approach explicitly and exclusively seeks positive change. The hypothesis defines the improvements and the action to be taken to achieve this change. Both the current unsatisfactory state and the anticipated revised state have to be operationally described in such a way that they can be compared. The positively stated hypothesis is to be rejected if the desired state, which was described a priori, is not achieved. At the rejection of the hypothesis a new action to be taken is suggested that has, from the experience gained, a better chance of success in terms of the defined goal. This hypothesis again is tested. In order to eliminate waste in time and human resources, the data needed for testing the hypothesis will not be assembled at the conclusion of the study only. Periodical or continuous data gathering is built into the design, and will help the researcher to decide whether any kind of progress is being made. If after a predetermined period of time all evidence suggests that the action taken is inconsequential, the action (and the hypothesis) is revised accordingly. Periodical data gathering will be designed in such a way that not only the amount of change can be observed, but the researcher will find clues as to the direction to be taken in order to arrive at the desired results.

The procedures for gathering, analyzing and interpreting the data will in many cases be those used in classical research. The humanistic researcher, however, will not be content with one instrument or one kind of data only, but will use all devices and sources for collecting evidence that are feasible. In classical studies, a researcher often has to disregard information, because it is subjective or individual, rather than "typical" and "objective." The inclusion of this kind of data is one other major distinction between the classical and the humanistic approach. The humanistic researcher will need to learn how to extract the essence from subjective reports of persons involved in the project, and how to synthesize such reports in a manner that allows new insights. Observations of all kinds will take a prominent place in humanistic research. Our current technology enables us to use videotapes

and other means of recording which were not available or not economical for the early action researchers. In addition, new alternative methods of information gathering might need to be developed, or older ones from other behavioral sciences (the clinical interview, social interaction analysis, anthropological observation, etc.) refined. Likewise, the processes of analyzing and interpreting the information gathered will partly be similar to those used in classical research (for instance, using statistics where appropriate), but partly will have to be expanded and adapted to unconventional kinds of data. Corey in his action research book suggests useful models for conducting improvement-oriented research [14 pp. 40-41], and so does Wiles when he describes and exemplifies the process of "directed thinking" [62 p. 14, 19].

In addition to being systematic, the humanistic approach is rational. "Humanistic" may sometimes refer to the intuitive or emotional; here it emphasizes the reasoning powers of human beings. At any time during a study the humanistic researcher has to use either solid logical arguments or factual evidence to make his/her point. The choice of problem is not accidental. The need for improvement has to be established, just as other studies must show the need for the acquisition of the particular knowledge. The description of the desired improvement, even though it may derive from the researcher's subjective choice, has to be convincing and shown to accord with that desired by other workers in the field. The means chosen for collecting data have to be appropriate, and the analysis and interpretation of the information has to be as logical and convincing as in any other research study. In fact, where the classical researcher can often make use of conventional agreements -- like the acceptance of a certain confidence level when using statistics -- the work of the humanistic researcher will have to rely on impeccable internal consistency and rationality, such that it will be all but impossible for colleagues to disagree with her/him.

Humanistic research is not only rational, it is also objective. This point is easily overlooked, since one of the positive aspects of action research was the recognition of subjectivity on the part of the researcher. The researcher is an individual with his/her own preferences, a certain philosophical outlook on education, and the ability to learn from one's research. All these subjective elements

necessarily influence the choice of the research problem, the definition of improvement, and the commitment to producing valuable results. In addition, using the humanistic research approach the researcher is deliberately intervening with the phenomenon he studies, and therefore is not objective in the same sense as it has been required traditionally from a scientist. All this, however, merely sets the stage for the actual research process. During the process itself, the humanistic researcher acts as conscientiously neutral toward his/her discoveries as his/her colleague in the natural sciences. Data are collected and recorded in a way that allows for all related evidence to be disclosed (rather than unfavorable outcomes to be suppressed), and the analysis and interpretation of the information gathered is done with the same accuracy and open-mindedness as that of any sincere researcher. Only if the researcher is objective concerning his/her findings will his/her results be convincing to his colleagues and make the contribution s/he desires.

Humanistic research does not lose any of its planned orderliness, its rationality, or its objectivity through the fact that it is also realistic. The term realistic is used here in the sense of taking into account the amorphism and inter-relation of reality. The researcher knows that he can do only his humanly best under the given circumstances. This may involve compromises, which the classical researcher would not be willing to make in order not to sacrifice the purity of his design. If the researcher in education would exclusively take this stance, s/he could tackle only very few problems. Reality for the educator in educational settings means "uncertainty, complexity, immediacy, and competitiveness" [62 p. 23], and the recognition that "knowing" in the social sciences is relative, not constant. It takes courage for a researcher to do research in the social sciences, and especially to use the humanistic approach, since criticism comes easier. The researcher needs to anticipate such attacks and to be able to convince the reader that he has not acted naively. All variables which cannot be controlled are given proper consideration as to their possible impact, and all procedures used are justified as the ones likely to yield the maximum result. The realistic situation is described sufficiently to enable the reader to form his/her own judgment as to the soundness of the researcher's results. These results will not be as final and conclusive as

the purist would like them to be, but they will be the best possible under the circumstances.

Not everybody will be satisfied that "the best possible" results achieved in a real life rather than a laboratory situation will do. Research, they claim, is an activity specifically designed to relieve us of uncertainty or relativity, and either we know beyond a shadow of a doubt, or we do not know at all. Cronbach is one of those who regrets that research has come to take on such a restricted meaning to many people. In fact, he considers this development so unfortunate that he suggests substituting the term "disciplined inquiry" for "research" in order to escape the narrow definition many writers imply. "Inquiry," he explains, "is not restricted to the scientific," but it is essential that it "places a premium on objectivity and evidential tests" [16 p. 6]. Cronbach's requirements are that the researcher "holds himself to the highest standards of careful observation and systematic reasoning," and that "the detail of the argument, whether it is describing methods of data collecting or the derivation of practical recommendations, (be) lucid, specific, and pertinent" [16 p. 9].

Such a broader research definition, without doubt, includes the humanistic approach. It is also encompassed by the generous interpretation of B. Tuckman, who considers research "a systematic attempt to provide answers to questions" [54 p. 1]. On this he is quite in agreement with the dictionary. He then, however, hastens to specify its characteristics: research is systematic ("there are rules for carrying it out"), logical (rather than "off-the-top-of-the-head"), empirical ("has a reality referent"), reductive (the researcher "reduces the confusion of individual events and objects to more understandable categories or concepts"), replicable and transmittable [54 pp. 10-12]. Most methodologists will agree with this list. Except for the last two criteria all are ingredients of the humanistic research approach. Replicability and transmittability, however, require modification when used with this concept, and therefore they deserve special attention.

VIII. FROM GENERALIZABILITY TO TRANSMITTABILITY

Replicability and transmittability lend a tentative permanence to research. The findings are important, because they do not refer to the here and now only, but can be regarded as some kind of general truth, at least until more is known through additional research. The way researchers attempt to achieve this permanence is through a research design which allows for generalizing of their results. When Corey had to tackle this problem in his treatise on action research he tried to reconcile the here and now orientation of the action-hypothesis with the requirement of generalizability. He solved the problem through the invention of vertical generalizability. The sample used, he claimed, should be seen as one drawn from the future population of students of the action researcher.

As mentioned in section V there is some justification to this notion. However, the unpredictability of the future makes such a contention quite unconvincing. It is hard to imagine that the insights gained as to the value of a new method will not be obsolete within a few years when this method becomes the old one, which is replaced by a still more innovative approach. Students of the same age a few years later might have gone through quite different experiences due to educational progress, and teachers may have grown professionally or changed their attitudes. The assumption of generalizability in action research is a hazardous one.

When prominent researchers in 1938 compiled the 37th Yearbook of the National Society for the Study of Education they felt much the same about all research in the classroom. They were referring to the use of the "scientific" research method which they praised for its rigor. Applied to any life situation, however, they contended it had major limitations, like the complexity of the experimental factor, the potential unreliability of measuring instruments, and the absence of dependable information concerning the factors to be controlled in a given situation. Even "if it were assumed that the non-experimental factors had been adequately controlled and the measurement of the dependent variable had been satisfactory," they continue, "there still remains the question of the essential characteristics of the larger population . . .

these essential characteristics include traits of teachers, traits of pupils, teacher-pupil relationships, characteristics of the school and its curriculum, and possibly characteristics of the community" [61 p. 326]. That is why "many experimenters refrain from generalizing when reporting their studies" [61 p. 326]. It was hoped that research methods would be perfected to overcome these limitations.

With the sophistication of research methods, however, even more error possibilities were discovered. The concept of external validity came into use, referring to the cluster of factors which affect the generalizability of findings. Borg identifies these as four major ones: 1. The reactive effect of testing; 2. The interaction of the experimental treatment with particular student characteristics, measuring instruments, and the time of study; 3. The possible artificiality of the experimental treatment and the students' knowledge that they are involved in an experiment (Hawthorne effect); and 4. Multiple treatment interference [9 pp. 368-370]. Obviously, external validity is not easy to achieve. In addition, it is only meaningful to discuss this external validity after a study's internal validity has been established; a study has internal validity if "the outcome of the study is a function of the program or approach being tested rather than of other causes not systematically dealt with" [54 p. 6]. Internal validity, consequently, is a prerequisite for external validity. The probability of occurrence of a subtle or undetected error affecting either the internal or external validity of a research study is especially high in education because of the complexity of the realistic situation. There still is no way of knowing -- just as in 1938 -- which intervening variables might not have been controlled, or even whether the sample is indeed representative of the larger population. Everybody who has ever attempted to do educational research knows that they have to rely on certain assumptions and that compromises in the design are almost always inevitable. Most methodologists advise the researcher to exercise extreme caution when generalizing from their results. It can be assumed that if rigorous standards were applied to existing studies in education, their generalizations were more often than not found questionable.

The conclusion could be drawn that therefore most education research studies are invalid or useless. This conclusion would be disputable because it is based on the assumption that generalizability determines the value of a study. In conclusion-oriented research this assumption is probably correct. The very name implies that we want to be able to draw conclusions, to ascertain certain facts. Our conclusions pertain to "the way things are," not only to what happened during the particular research undertaking. Replicability and generalizability are therefore essential for the validity of such a study.

In decision-oriented inquiry, however, the aim is not primarily to find out, but to influence the decision of educators by providing information on how improvement can be achieved. It is true that we can influence best by establishing some basis for the claim that a particular method or process is likely to work in most cases. Therefore, other educators can assume it will work in their own case, as well, and will consequently adopt the advocated innovation. Decision-oriented researchers, however, know that they can never bring proof that their method will always work. Even when their research design allows them to generalize from their study, they are merely talking about a degree of confidence which can be placed in the applicability of their findings to future similar situations. Remember that the most widely used criterion for establishing whether the findings of a research study will be considered negative or positive is statistical significance. Statistical significance, however, is based on a mere conventional human consensus. If the results found by the study would, according to probability theory, have occurred by chance only 5 out of 100 times, we agree this is quite unlikely, and we are justified to exclude chance as an explanation for the occurrence of the results. Some researchers prefer the .01 level of significance, a few are satisfied with a 0.10 level. Whether the results of a study in the social sciences are "valid" depends, therefore, a great deal on whether the reader accepts them as such.

The humanistic approach to research recognizes this fact. Where the classical researcher can "prove," the humanistic researcher can only convince. The closer he comes to proving, the more convincing he will be. However, he does not place undue faith in generalizability. In the strict scientific sense, findings from

humanistic research studies cannot be generalized. They can only be transmitted. "Transmitted" here means accepted and used by others. The history of educational research has shown that generalizability does not in itself guarantee the acceptance and use by other educators. Research findings need to have in addition to methodological and statistical sanction, a certain appeal to the reader, a quality which makes him/her want to apply the research findings to his/her own situation. Without this appeal the research may be valid, but worthless. "An intellectual conclusion about education," claim Cronbach/Suppes, "has no effect on the classroom until teachers have accepted the idea, have decided to use it, and have made thousands of detailed decisions about its day-to-day application" [16 p. 171].[5]

Humanistic research, therefore, aims at the transmittability of its findings without depending on the notion of generalizability. Since the humanistic researcher will make use of a systematic procedure of inquiry, it is possible that parts or all of his findings are generalizable in the same way as those of classical research. Other humanistic studies might not yield generalizable findings, since strict criteria for generalizability are not met. Meeting these criteria is less important than that the results are persuasive. The reader will have to agree that the suggested improvement is desirable, in fact, even necessary, that the situation under which the researcher worked closely resembles his/her own, that it will be possible for him/her to apply the same method, and this method will also work for him/her.

This last item is probably the most essential for transmittability. An educational innovation which was determined to be successful through a study with generalizable results has a very small chance of being adopted by others if the educator who is asked to use it does not quite believe it will work. Just as methodologists argue that the researcher's enthusiasm for the innovation he is studying (his/her bias) is tending to influence the results, one can claim that the user's bias will do just the same. Humanistic research takes advantage of this argument. Its

[5]It is interesting to note that, conversely, researchers are sometimes warned not to state their results in too certain terms, since "the consumer will make generalizations from (these) results, even though such generalizations may be unwarranted or even illegitimate" [59 p. 42].

aim is to deliberately create bias in the reader, to convince him/her that what s/he has read is worthwhile and will work if s/he uses it. If the humanistic researcher cannot achieve this goal his/her study is invalid,--even though theoretically s/he might be able to generalize his/her results. Obviously, it can be reached only when adhering to the four requirements for humanistic research (it has to be systematic, objective, rational and realistic) and when the researcher, in addition, chooses a problem and defines a positive change which has wide appeal to educators and which "touches" them.

Since this kind of transmittability is a foremost objective of humanistic research, the action or actions taken and the researcher's situation have to be described in an extremely precise manner in order to allow replicability. The term replicability is used in humanistic research not to suggest exact reproduction, but with the idea of providing a working model, as Dewey defines it: "A working model is not something to be copied; it is to afford a demonstration of the feasibility of the principle, and of the methods which make it feasible" [Dewey in 16, p. 51]. A second prerequisite for transmittability is the use of a language which is free of jargon, such that it is attractive and understandable to practitioners.

The modifications of the concepts of transmittability and replicability within the humanistic research approach may lead critics to argue that it will be all but impossible to determine the value of a particular study. Objective criteria, like an error-free design, statistical significance, or generalizability, cannot be applied with equal strictness to humanistic and to classical research. However, in any classical study within the social sciences, these criteria are useful only up to a certain degree. As mentioned earlier, some assumptions and compromises need to be made, and the researcher has to convince his/her readers that these will not invalidate the study. "The social studies are dominated by arguments," claims Gordon Tullock [55 p. 192], and there exists hardly any research study in the social sciences, that is totally convincing on all points to all educators. Whether a particular study that uses the humanistic approach represents valuable research will depend on whether a panel of research methodologists and practical educators consent that the researcher

has done the best humanly possible investigation under the circumstances, and that the findings are of educational significance.

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IX. THE INTEGRATION OF RESEARCHER AND PRACTITIONER

Vertical generalizability could be considered the basic theoretical flaw of action research. The basic practical defect turned out to be the strategy of having researchers from an academic setting work together with practitioners from the schools. The idea underlying this recommendation was commendable: the practitioner personally would have experienced educational problems that needed solutions. Their relevance was established; they were not artificial, not tailored to fit the methodology of the investigator. The skilled researcher would lead the group of practitioners, teaching them how to use research tools and how to collect data. The analysis and interpretation would then be a joint effort and either confirm the hypothesis or lead to further action and research.

Many useful and valid action research studies were conducted using this cooperative approach. Teachers were more willing to accept research findings. Corey had stressed that "one of the psychological values of action research is that the people who must, by the very nature of their professional responsibilities, improve their practice are the ones who engage in the research" [16 p. 141]. They did not feel the research was alien to real life in the classroom. Whether an action research study was carried out successfully or not, would, however, depend on one single factor: the mutual trust and respect within the research group. Practitioners could easily resent the methodologist's demands on their time, his/her desire for control, his/her interest in patterns and generalization, and his/her unfamiliarity with the facts in the field. The researcher, in turn, would become impatient with the practitioners' "preoccupation with the myriads of facts" [35, p. 385], their apparent inability to appreciate minute methodological details, and their reluctance to comply with every one of the methodologist's requests. Thus more often than not a research group would run into internal problems, and quite likely fail to produce the results it set out to achieve. It was difficult to overcome the traditional resentment between the "unsophisticated" practitioners and the "esoteric" researcher.

Consequently, the number of research projects undertaken by groups of educators dwindled drastically after the first excitement

about the new action research approach cooled off. The value of the involvement of practitioners, however, has never been questioned. In fact, educational philosophers today again demand the input of the practitioner when they recommend ways of improving educational research results. "To my mind the main source of progress in education must always come from teachers," writes C. D. Hardie [23 pp. 98-99], and J. A. Easley adds, "the only hope I see lies in the collaboration of skilled teachers with specially trained educational research workers in extended and systematic exploration (of new curriculum possibilities)" [17 p. 63]. As described above, this strategy is often impractical.

The humanistic research approach will avoid stress between researcher and practitioner by suggesting that they can be combined in one person. Many methodologists have pointed out that conscientious teachers and administrators, who try to improve their practices, apply a problem solving strategy, which is very close to strategies used in the research process [6 p. 7]. Wiles, in particular, claims that we are observing a change in the role definition of researcher and practitioner. "The practitioner relied heavily on experience and feelings gained from years of educating children. On the other hand, the researcher was normally pictured as the university professor whose abstract, sterile thoughts circled in the clouds of academia. But during the 1960's it became evident that similarities between the two kinds of educators far outweigh the differences." He predicts that in the future many educators will be both researchers and practitioners (see p. 10) [62 p. 8].

I concur with Wile's analysis. New developments in education have provided a resource for today's research-oriented practitioners that was not available to the action researchers of the 1950's and 1960's: the non-traditional graduate schools. External degree programs make it possible for experienced practitioners, who have assumed the habit of critically evaluating the outcomes of their work, to enter or re-enter graduate school and acquire the research skills needed to conduct valuable and thorough inquiries, which will provide solutions to their problems. Ten years ago it would have been all but impossible for a seasoned principal or college instructor to learn how to become researchers, since they would have had to abandon professional and private responsibilities and go back to classrooms filled with students half their age and

conducted by instructors unaware of their needs.

External graduate degree programs afford ideal opportunity for humanistic research projects. Their students are mature and experienced educators who work in the field. While graduate students in traditional programs usually conduct lengthy searches for a suitable research problem, these educators are often haunted by real problems, and will have to decide which one to tackle first. The methodology is developed to suit the research question; it will not determine the choice of project, but merely delimit it. Educators in external degree programs are already working in their own research setting -- their classroom, their school, their school district -- often with power to implement new practices and to experiment. They do not have to restrict their research to general surveys or to be entirely dependent on the cooperation of others. In addition, they are less likely to assume the jargon customarily used to report research findings, since they are writing for their colleagues. They have talked to them about their problems many times, they know what their concerns are and what they want to find out, and they are able to relate to them on their own wave-length.

The contribution of our traditional graduate schools lies in their ability to produce rigorous researchers. As discussed earlier, humanistic research comprises only part of the educational research effort. Basic, conclusion-oriented research is equally needed and valuable It is the kind of research educators will want to do when they are more interested in satisfying our intellectual curiousity about education as a social and psychological phenomenon than in solving practical problems encountered in the classroom. They will have to acquire sophisticated statistical and data processing skills, which might go beyond the basic techniques that can be mastered in independent and tutorial study as practiced in external degree programs. It might be assumed that educators who do not interrupt their graduate training in order to work in practical educational settings, are concerned primarily with theoretical questions and research activities. They may be planning to remain in an academic setting and will be able to use their research skills for the solution of problems best solved by classical research methods.

On the other hand, an experienced educator who is dissatisfied with inefficient or harmful practices which s/he encounters in professional life, is likely to find the humanistic research approach the appropriate one for the solution of his/her problems. The contribution of external degree programs lies in their ability to equip practicing educators with research skills that are useful in the school setting, without removing them from that setting. By creating a valid alternative to the traditional residency requirement, they make the integration of the roles of practitioner and researcher a sound and obtainable objective.

X. SUMMARY

It has become apparent and widely acknowledged that educational research that uses what may be called the classical or "scientific" method has not had the impact educators half a century ago predicted it would have. The term scientific in the context of research refers to a method developed in the natural sciences and adapted to the social sciences largely through the use of various types of measuring instruments, a controlled environment, and some of the principles of probability theory. Scientific research techniques have been refined and have become very sophisticated. Through the application of classical research methods we have gained a large number of valuable insights which advanced our knowledge about education, especially in the fields of learning theory and child development.

It is not the method which has failed. The discontent of educators with the "exceedingly modest results that educational research has achieved thus far" [10 p. 66] stems from the exclusiveness of application of and recognition for the "scientific" method, and a narrow definition of the term. The principles of classical research dominate most educational research methodology books in such a way that diversions from this method are automatically regarded as "unscientific" and therefore invalid.

This sentiment used to be so strong that when, twenty-five years ago, the first attempts were made to add to the range of educational research methods, the propagators of action research felt compelled to assure their audience that they, too, were using a "scientific" approach. The fact that their interpretation of the term did not coincide with that of hard-core scientists earned them their contempt, and was one of the reasons for the disrepute with which action research finally was regarded.

Today we witness an increasing demand for relevance in educational research and a corresponding lack of confidence in the all-embracing power of the classical, "scientific" research method. More and more educators and researchers ask "whether educational research should model itself after the natural sciences or should seek methods and approaches that are more suitable to the concrete and somewhat amorphous problems of

education" [10 p. 66]. It is my contention that educational research cannot rely exclusively on one methodological approach. The classical method has been successful mainly in conclusion-oriented ("basic") research; it often was of limited use in decision-oriented ("applied") research. This area is in need of a methodological approach which supplements (not replaces) the "scientific" method. It will be called humanistic research, -- not to mean that it is unscientific -- but to convey that its concern is with the human condition, and that it will take into account the complexity of the human situation.

Humanistic research acknowledges its debt to action research. It grew out of the same dissatisfaction, and it will retain some of the action research concepts. Action research did not claim to make any contribution to conclusion-oriented research. It can be used only for the purposes of decision-oriented research, and humanistic research shares these limitations. Both are essentially not new methods of conducting research; rather they call for a new approach, a new attitude, a new philosophy in research. The humanistic approach, however, not only revives action research strategies, but refines and revises them. It goes beyond action research through the recognition and avoidance of its deficiencies and the addition of new elements.

The following are the essential characteristics of the humanistic research approach:

1. The relevance and urgency of the problem always takes precedence over methodological considerations. Research studies are done not because the problem lends itself to research, but because educational practitioners need an answer to a question. Without that answer their functioning will be impaired. The problem is tackled in its complexity, where a breakdown into "researchable" parts proves unfeasible, and the researcher will use all and any means and techniques that promise results. He does the best humanly possible research under the given circumstances, striving to give at least a tentative or incomplete answer, if a final and total one is unattainable. He will not sacrifice the educational relevance of the study.

2. As in action research, the goal and distinctive feature of humanistic research is the improvement of an unsatisfactory

educational situation. The researcher is not interested in studying a phenomenon in order to describe or explain it and find out the "truth." Humanistic research wants to bring about positive change. The research tool used to achieve this end is the action hypothesis. Its basic form can be stated as "if action X is taken, improvement A will occur." Rather than trying to establish whether or not there is a difference between two groups or in one group over a period of time, the action hypothesis forces the researcher to test whether an a priori established and defined improvement has occurred. The result at the end of the action is compared with the state previously described as desirable. A rejection of the hypothesis is not acceptable as a research outcome. If improvement A (which is a constant) did not occur, X, the action, has to be revised. The research project will be completed only when the desired positive change has been achieved or the researcher can demonstrate convincingly that no means exist at this time to bring it about.

3. The humanistic researcher acknowledges his/her own subjectivity. S/he cannot be detached, neutral, and objective in the choice of the research topic, and s/he is aware of his/her "contaminating" influence in the course of the action s/he takes to improve the unsatisfactory situation. It is the researcher's value system which determines the definition of "unsatisfactory," as well as the description of what constitutes improvement. S/he does not hide the fact the s/he has a stake in the outcome. His/her motives and values are laid open for the reader and can be taken into account. Conscientious neutrality, however, is observed in that phase of the research during which the researcher is able to and ethically forced to be objective: the collection, analysis, and interpretation of his data.

4. Humanistic research does not claim to be able to make generalizations. More often than not the scope and significance of a research study has to be narrowed to allow for a research design which makes generalizability possible. Generalizability, however, does not affect educational practices, as long as practitioners do not find the results worthwhile and accept them for themselves. When a humanistic researcher has discovered and described a way which brings about the change desired by practitioners, it is not important to prove that this method will work in every comparable situation and with every comparable group of learners. What is essential is to convince the reader

who is haunted by the same problem that this is indeed a solution suitable for him/her. The reader's expectation that a given approach will work is an essential requisite for success. A skeptical reader is likely to fail even with the "proven" method. If the researcher has given an accurate description of his/her situation and the means employed to improve it, and if the reader can identify with the researcher's value system, and agree with his/her reasoning, s/he will accept and successfully use the suggested improvement strategy. Therefore, the aim of humanistic research is not strict generalizability, but realistic transmittability to practitioners.

5. Humanistic research can be done by a single researcher. It is not dependent on the cooperation of a team, consisting of researchers and practitioners, as was action research. Rarely could an action research project be carried out by a single investigator, since very few educators were practitioners as well as trained researchers. With the advance of innovative programs in higher education, which allow experienced practitioners to acquire research skills appropriate for the solution of their problems, humanistic research studies can be carried out by individual educators. These researchers turned practitioners will have worked in education extensively enough to be familiar with the urgent, practice related questions that have evolved in their area of specialization, and to have reached a professional position which allows them to determine and control their research project and use their own educational setting to conduct it. They might want to work with other researchers and/or practitioners as a team; however, humanistic research skills can be acquired by professionals in mid-career and used by them on individual research projects.

6. Humanistic research is difficult and demanding, but for many people and problems, highly rewarding. The fact that it is possible for a practitioner to become a researcher and use a humanistic research approach might be interpreted to mean that humanistic research is easier, less intricate, and less sophisticated than classical research. This is as much a fallacy as to assume that all innovative graduate programs will be less demanding and less thorough than traditional institutions. It is probably to be expected that some educators might attempt to get away with sloppy research by calling it "humanistic." This would be unfortunate, but should not tempt us to discard the valuable

concepts of either mid-career graduate schools or humanistic research.

A humanistic research project is probably more time consuming and involved, and might require more dedication than a classical research project. Where the traditional researcher can follow the "recipe" in the methodology book, the humanistic researcher has to be more creative and resourceful. It is unlikely that many graduate students without practical experience in education can become efficient humanistic researchers. The humanistic researcher must discover within the functioning educational institution all possible means for collecting the data which will allow him/her to evaluate his/her actions, and s/he will have to invent new educational approaches whenever the initial action fails.

To convince his/her readers of the validity of his/her actions and findings, the humanistic researcher cannot always rely on eventual statistical significance. It has to be apparent that s/he did the best research possible under the given circumstances. This means that s/he will apply all and any of the methods used in classical research if they are appropriate for the study. His/her research, however, will not be limited by conventionally accepted methods of data collection nor will it be confined to objective, "hard" data. Like all authentic research, it will be systematic, rational and objective. There is only one attribute which the humanistic research approach does not share with classical research: it cannot always be rigorous. It does have to be realistic and relevant.

7. The humanistic research approach is realistic and relevant, but this does not imply that classical research is irrelevant and unrealistic, or that the humanistic approach presents the only or even better way of doing research in education. It will not contribute to the formation of a theory or the explanation of educational phenomena. It should not be used whenever rigorous research is possible and will serve the same purpose. Classical research is often also carried out with the explicit intention to use the findings to improve a given situation. Thus humanistic research does not claim to cover the area "applied" or "decision-oriented" research, while scientific research methods are restricted to "basic" or "conclusion-oriented" research. Both terms refer to a mode of researching, not to a content area.

During the last twenty-five years it has become apparent that the classical approach alone cannot solve all research problems. Its exclusive use in education has led many educators to believe that it is the only acceptable method of doing research, in spite of their disillusionment with its outcomes. New perspectives are needed. Humananistic research is a sensible alternative and supplement to the classical, rigorous research approach.

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